

Amendments to the Claims:

The listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

Claim 1. (currently amended) An illuminator comprising light sources mounted on a substrate and an integrally moulded lens covering the light sources, characterised in that,

the substrate comprises a layer of semiconductor material and pads of conductive and reflective material overlying the semiconductor material,

said pads are electrically connected to the light sources to provide power, and

the substrate is mounted directly on a heat sink,

wherein the substrate comprises a layer of electrically-insulating material over the semiconductor material and the pads overlie said electrically-insulating layer, and

wherein said electrically-insulating material comprises an oxide of the semiconductor material.

Claim 2. (currently amended) The ~~An~~ illuminator as claimed in claim 1, wherein the moulded lens material extends completely over the substrate and a top portion of the heat sink to hermetically seal the substrate and the light sources.

Claims 3 – 4 (cancelled)

Claim 5. (currently amended) The An-illuminator as claimed in claim 1 [[4]], wherein the oxide is thermally grown and has a dielectric strength in excess of 5×10^6 V/cm.

Claim 6. (currently amended) The An-illuminator as claimed in claim 5, wherein the oxide comprises SiO₂.

Claim 7. (currently amended) The An-illuminator as claimed in claim 5, wherein the oxide depth is at least 2 microns.

Claim 8. (currently amended) The An-illuminator as claimed in claim 1, wherein the pads comprise ~~comprises~~ reflective silver or gold.

Claim 9. (currently amended) The An-illuminator as claimed in claim 1, wherein the pads comprise a top sub-layer of a reflective metal over at least one adhesion sub-layer.

Claim 10. (currently amended) The An-illuminator as claimed in claim 9, wherein said adhesion sub-layer comprises Ti.

Claim 11. (currently amended) The An-illuminator as claimed in claim 9, wherein said adhesion sub-layer comprises Ni.

Claim 12. (currently amended) The An-illuminator as claimed in claim 9, wherein said sub-layers are deposited by evaporation over the oxide of the semiconductor material.

Claim 13. (currently amended) The An-illuminator as claimed in claim 8, wherein said sub-layers each have a depth in the range of 50 nm to 3 microns.

Claim 14. (currently amended) The ~~An~~-illuminator as claimed in claim 1, wherein said light sources comprise semiconductor die placed on said pads and wire bonds between the die and ~~bonded on said~~ tracks.

Claims 15 – 21 (cancelled)